

## Abstract

An ultrasonic flow sensor for measuring the volumetric flow rate of a flowing medium through a flow channel (24) having a transducer array (2) which is situated within the flow cross section of the flow channel (24) and which generates ultrasonic waves (27) which 5 propagate in the flow cross section of the flow channel (24) transversally to a flow direction (14) of the flowing medium, the ultrasonic transducer array (2) having an interlaid arrangement of transducer elements (4) which act alternately as transmitting (10) and receiving antennas, so that all emitted individual sound waves (27) interfere to form common wave fronts (28).

10 (Figure 1)